E-TENDER CALL NOTICE

Odisha Renewable Energy Development Agency invites e-tenders from the interested manufacturers/suppliers of solar PV systems in the country having valid test certificates from MNRE authorised test centres for their products for supply, installation, commissioning and maintenance of Solar PV Home lighting systems and Solar PV Street lighting systems in 204 un-electrified villages of Koraput, Malkangiri, Rayagada and Mayurbhanj district under the “Solar electrification programme in the state of Odisha for inaccessible ST villages”. For details, please visit our web site www.oredaorissa.com and www.tenderwizard.com/OREDA.

Memo No. 229 /OREDA

Copy forwarded to M/S Keonics, A Government of Karnataka Undertaking, No.29/1, Race Course Road, Bangalore -560 001 for information and necessary action.

Memo No. 241 /OREDA

Copy forwarded to the Principal Secretary to Government, Science & Technology Department, Govt. of Orissa, Bhubaneswar for favour of information.

Memo No. 242 /OREDA

Copy forwarded to the Principal Secretary to Government, SC & ST Development, Minorities and Backward Classes Welfare Department, Govt. of Orissa, Bhubaneswar for favour of information.
Memo No. 24/OREDA
Copy to Director (Admin), OREDA for information and necessary action. The tender call notice may be published in the "Daily Samaj", "Sambad", and all editions of "The Times of India".

Memo No. 24C/OREDA
Copy to all Divisional heads/Accounts officer, OREDA for information and wide circulation.

Memo No. 24F/OREDA
Copy to Notice Board/Website, OREDA for circulation.
DETAILS OF E-TENDER CALL NOTICE  
NO - 239 /OREDA , Dated- 29.01.2018

E-tenders are invited from the manufacturers/suppliers of solar PV systems in the country having valid test certificates from MNRE authorized test centres for their products for supply, installation, commissioning and maintenance of Solar PV Home lighting systems and Solar PV Street lighting systems in 204 unelectrified villages of Koraput, Malkangiri, Rayagada & Mayurbhanj district under “Solar electrification programme in the state of Odisha for inaccessible ST villages”

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Item</th>
<th>Quantity (Nos.)</th>
<th>Estimated Cost (in Lakhs)</th>
<th>EMD for the composite work in in shape of DD</th>
<th>Cost of bid document</th>
<th>Tender processing fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Solar Home Lighting System (MNRE Model - III), 24Wp, Load: 2 white LEDs of 2.5 watt and one DC fan of wattage upto 10 watt with 5 years warranty and CMC</td>
<td>7800</td>
<td>7,77,00,000/-</td>
<td>8,90,000/-</td>
<td>10,500/-</td>
<td>5,900/-</td>
</tr>
<tr>
<td>2</td>
<td>Solar Street Lighting System, (MNRE Model-II), 30WP, Load: 7 Watt with 5 years warranty and CMC</td>
<td>781</td>
<td>1,10,90,200/-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The bid documents are to be downloaded from OREDA Website. The cost of bid document may be paid in shape of Demand Draft drawn on any Nationalised bank in favour of Chief Executive, OREDA payable at Bhubaneswar. The cost of the bid document in shape Demand Draft has to be submitted along with the technical bid only. The bids shall be accompanied with the required EMD and valid GST clearance certificate without which the same shall be rejected.

The Chief Executive, OREDA reserves the right to accept / reject any or all the bids without assigning any reason thereof.

-sd-
Chief Executive
OREDA
ODISHA RENEWABLE ENERGY DEVELOPMENT AGENCY
BHUBANESWAR

BID DOCUMENT

FOR

Supply, Installation, Commissioning and Maintenance for a period of 5 years of Solar Photovoltaic Lighting Systems under the programme

"Solar electrification programme in the state of Odisha for inaccessible ST villages “

S-3/59, MANCHESWAR INDUSTRIAL ESTATE , BHUBANESWAR-751010
Phone : (0674) 2588260,2586398,2580554. Fax:2586368
Website: www.oredaorissa.com.
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Preamble:

Odisha Renewable Energy Development Agency, Bhubaneswar with the financial support of ST & SC Development Department, Govt. of Odisha intends to provide solar based clean lighting solutions to each unserved tribal households in selected villages/habitations spread over four tribal districts namely Koraput, Malkangiri, Rayagada and Mayurbhanj. The systems would broadly consist of Solar PV Home Lights and Solar PV Street Lights. The assignment would inter alia include supply, installation, commissioning and maintenance of the systems for a period of five years.

Timely maintenance of the systems being the key for sustainability of the program a three tier maintenance mechanism involving the village level, Block/ cluster level and state level has been recommended. Such maintenance mechanism has been detailed out in this document.

Documentation and record keeping is another key area that needs thorough and meticulous involvement. Village details, beneficiary details, system details, GPS locations, photographs, ID proofs etc are some of the important documents at the pre installation and during installation stages. Similarly system service and maintenance records are very important in the post installation period. The details of the documents and procedures to be followed have been discussed elsewhere in this document.

Quality assurance and timely completion of the projects, proper documentation and regular follow up and maintenance are of paramount importance which calls for greater involvement of the vendor agencies which inter alia includes strong local presence and long term commitments.
## Important Dates

<table>
<thead>
<tr>
<th></th>
<th>Date of hoisting of the bid document on website</th>
<th>29.01.2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Date &amp; time of prebid meeting</td>
<td>05.02.2018 (3:00 PM)</td>
</tr>
<tr>
<td>3</td>
<td>Date of hoisting of final revised bid document</td>
<td>08.02.2018</td>
</tr>
<tr>
<td>4</td>
<td>Last date &amp; time for submission of online bids</td>
<td>Up to 1.00 P.M. of 22.02.2018</td>
</tr>
<tr>
<td>5</td>
<td>Date and time of last submission of hard copy of bids</td>
<td>5.00 P.M. of 23.02.2018</td>
</tr>
<tr>
<td>6</td>
<td>Opening of technocommercial bid</td>
<td>3.00 PM of 24.02.18</td>
</tr>
<tr>
<td>7</td>
<td>Opening of the price bid</td>
<td>To be intimated later</td>
</tr>
<tr>
<td>Sl No</td>
<td>Particulars of Item</td>
<td>Status</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Copy of valid GST clearance certificate</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Copy of audited balance sheet and profit and loss account for 14-15, 2015-16 and 2016-17 clearly indicating the turnover from solar PV business</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Certificates from the authorized officer of the concerned SNA/ copy of the work order as proof of experience in any village electrification programme of the Govt. of India.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Proof of production capacity.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Recent test certificates from appropriate authorized test centres of MNRE, GOI</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Xerox copy of the Income Tax PAN card of the company</td>
<td></td>
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<tr>
<td>7</td>
<td>Xerox copy of Service Tax Registration Certificate</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Original Money receipt/Demand Draft as proof of payment of Tender Cost</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Demand Draft submitted as Earnest Money, cost of tender document, and tender processing fee.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Undertaking for Indignity of the supplied item</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Willingness to open a local office at Bhubaneswar before commencement of work</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Undertaking to open cluster level service centres at suitable places as will be indicated by OREDA.</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Undertaking to unconditionally accept all terms and conditions of the bid document</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Power of attorney to sign the agreement on behalf of bidders &amp; partnership deed articles, if any.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Technical bid in format in Annexure A1 and A2</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Price bid in Annexure B1 and B2 in separate sealed cover</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Filled in bid document duly signed and stamped at the bottom of each page</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Organizational profile</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Covering letter</td>
<td></td>
</tr>
</tbody>
</table>
Definitions

**Solar Home lighting Systems (Model-III)**
A solar home lighting system (Model-III) as per this tender should comprise of a 24 Wp under STC solar PV module, a 12V -20AH @C/20 lead acid tubular flooded/GEL/VRLA battery with battery box, a charge controller, two white LEDs of 2.5 watt and one DC Fan of wattage upto 10 watt, module mounting structure, wires and cables etc. as specified in the technical specifications and should be able to provide solar electricity for operating lamps for at least 4 hours per day.

**Solar Street Lighting systems(Model-II)**
A solar street lighting system (Model-II) as per this tender should comprise of a 30 Wp under STC solar PV module, a 12V-20Ahr sealed maintenance free lead acid tubular flooded/GEL/VRLA battery with a battery box, 7 Watt W-LED luminaire, control electronics, GI mast, inter-connecting wires/cables, module mounting hardware etc. as specified in the technical specifications and should be able to provide solar electricity for operating the lamp for dusk to dawn operation.

**Balance of System (BOS)**
The balance of system or BOS encompasses all components of a photovoltaic system other than the photovoltaic panels. This includes wiring, switches, support racks, an inverter, and batteries

**Manufacturer**
1. A person, group, or company that owns or runs a manufacturing plant.
2. A person, group, or company that manufactures.

**CMC**
Fixed free service provided by a contractor for periodic maintenance of equipment which in the present case would include 5 years maintenance of the installed solar PV systems including all required spares and consumables and even total replacement of the system, if necessary.

**Warranty**
A written guarantee, issued to the purchaser of an article by its manufacturer, promising to repair or replace it if necessary within a specified period of time.
1. **Eligibility Criteria**

1.1 All manufacturers/System Integrators of solar PV systems, who have got their products tested and qualified by any of the authorized test centres of MNRE, GOI (List attached at annexure C) and have submitted information to the test centre about the company along with a copy to the Ministry in the MNRE format will be eligible to participate.

1.2 The firm must have valid GST clearance certificate.

   *(Pl. attach copy of valid GST clearance certificate)*

1.3 The firm must have valid income Tax PAN and Service Tax Registration Certificate

   *(Pl. attach copy of valid income Tax PAN and Service Tax Registration Certificate)*

1.4 The firm must have a minimum annual turnover of Rs 50.00 crore over last three years in the business of solar PV alone.

   *(Pl. attach copy of audited balance sheet for 2014-15, 2015-16 and 2016-17 clearly indicating the turnover from solar PV business)*

1.5 The firm must have electrified through solar system at least 50 remote villages in each of any 3 years out of last 5 years beginning from 2012-13 in any part of the country under the Remote Village Electrification Programme/any other village electrification programme of the Govt. of India/state Government.

   *(Pl. attach certificates from the authorized officer of the concerned SNA/attach copy of the work order)*

1.6 The product must conform to minimum technical requirements/standards for off-grid/standalone solar systems to be deployed under the National solar Mission and the firm must have established necessary quality assurance systems and organization in line with the same.

   *(Pl. attach copies of recent test certificates from SEC/other authorized Test Centres of MNRE, GOI as well as details of quality assurance systems as proof thereof)*

2. **Scope of the work**

The broad scope of the work would be supply, installation, commissioning and maintenance for 5 years of the specified solar PV systems in specified households, community centres, locations in specified tribal villages/hamlets. This would inter-alia include

2.1 A clear understanding of the logistics and other features of the assigned tribal villages. This may require a prior visit to the enlisted villages.

2.2 The no. of home lighting system and street lighting system may vary after detail survey.

2.3 Storage facility to be provided by the vendor for pre-installation inspection at intermediate points for facilitating inspection by the designated official of OREDA.

2.4 Supply of complete solar PV systems like Home Systems (W-LED Model-III) and Street Lighting Systems (W-LED Model-II) as per technical specifications given subsequently in this document.
2.5 Installation of the supplied systems in specific locations like households, community centres waysides as directed by the designated officials of OREDA in consultation with the Villagers.

2.6 Comprehensive Maintenance Contract (CMC) of the complete system for five years warranty period. The date of commencement of CMC shall be reckoned from the date of commissioning of the last system of the given order.

2.7 Training at least two youths from each of the project village in assembling and installation of the systems including providing first aid maintenance services.

2.8 Open at least one cluster level service centre for a cluster of 20 to 25 villages and one state level service centres in Bhubaneswar so as to deliver uninterrupted and sustainable maintenance services.

2.9 The successful bidder shall after completion and commissioning of the systems submit all details of the installed systems like beneficiary details, systems details, installation report, etc. in the formats to be provided at the time of issue of purchase order. The details will also include Photographic proof of delivery of the system to the genuine beneficiary, GPS location of the village.

2.10 All necessary conditions as further outlined in the subsequent sections of this document are to be followed.

3. Instructions to Bidders

3.1 General Instructions

- Interested bidders are advised to view the detailed tender documents on www.oredaorissa.com or www.tenderwizard.com/OREDA.

- Bidders desirous of participating in the tender shall have to pay the tender costs mentioned in TENDER SCHEDULE. The tender cost is required to be paid in shape of Demand draft only, drawn in favour of Chief Executive, OREDA payable at Bhubaneswar. The tender cost is inclusive of GST and is not refundable.

- All participating bidders shall have to pay the non-refundable tender processing fee as mentioned in TENDER SCHEDULE to K.S.E.D.C. Ltd. Bangalore through Tender Wizard Portal on e-payment modes only such as credit/debit cards, Net banking etc.

- Earnest money as specified in bid should be deposited in shape of Demand Draft drawn in favour of the Chief Executive, OREDA payable at Bhubaneswar from any nationalized bank. Alternatively the EMD can also be submitted in shape of Bank Guarantee from any nationalized bank in the format given at Annexure-2 having validity of 45 days.
• The bidders shall submit copies of documents defining their respective constitutional or legal status, place of registration and principle place of business of company or firm or partnership.

• Only bidding companies are required to submit Board Resolutions in prescribed format given at Annexure-3.

• Bidding firms are required to submit documents related to assignment of Power of attorney to sign the agreement on behalf of bidders.

• Bidding Partnership firms are required to submit complete partnership deeds along with the bid documents.

• The bidders shall submit reports on their financial standing such as audited profit and loss statements, balance sheets, auditor’s reports and bankers’ certificates for the past 3 years. All accounting statements must be duly audited and submitted along with the auditor’s note on accounts and accounting standards.

• The bidders shall submit information on their performance during last 3 years in format given at Annexure-4.

• The bidders shall have to indicate their capacity to manufacture/integrate the different solar PV systems asked for in this tender within the specified time after meeting all their other similar commitments.

• The supplied materials should strictly comply with the specifications as mentioned in the bid, otherwise the material would be liable for rejection.

• Certificate to the effect that the systems to be supplied are indigenous & not fully imported must be furnished.
• Since timely execution of works is of paramount importance, requests for extension of time shall not be ordinarily entertained.

• Notice inviting tender, bid documents, prescribed Technical bid, price bid, terms & conditions will form the part of the tender.

• Bidders may in their own interest visit the sites before submitting bids.

• All Taxes applicable at the time of supply will be admissible.

• In case of supply of any defective material or substandard material, the materials will be rejected & it will be the responsibility of the supplier for taking back & replacing the rejected materials at their own cost. In case of non-lifting of such rejected materials within a reasonable time offered by the office it will have the right to suitably dispose off the same and forfeit the amount.

• OREDA will not be responsible for any incidental or consequential losses of the firms while execution and till expiry of the period of maintenance.

• During the warranty period, MNRE/ State Agencies/ Users reserve the right to cross check the performance of the systems with the minimum performance levels specified in the MNRE specifications.

• Deviations in terms and conditions, Specification of material, Inspection clause etc. will not be accepted under any condition.

• The Electronic Form/Template of the Techno –Commercial bid, as available on the portal, shall be duly filled in and scanned copies of documents in support of meeting the minimum qualifying requirement of the tender shall be given as attachments

• Prices quoted must be firm and fixed. No price variation / escalation shall be allowed during process of completion of the project.
• Any condition in regards to financial aspects, payments, terms of rebate etc. beyond the prescribed financial terms of OREDA will make the bid invalid.

• Therefore it is in the interest of the bidders not to write anything extra in the Price Bid except price.

• Canvassing in any manner shall not be entertained and will be viewed seriously leading to rejection of the bid.

• All subsequent addendum/Corrigendum to the tender shall be hoisted in OREDA’s official website www.oredaorissa.com and www.tenderwizard.com/OREDA only.

3.2 SUBMISSION OF BIDS:

• The bids must be submitted only online on www.tenderwizard.com/OREDA portal.

• The bidder must ensure that the bids are received in the specified website as per the date and time indicated in the Tender notice.

• The bidders are advised to register their user ID, Password, company ID on website www.tenderwizard.com/OREDA by clicking on hyperlink “Register Me”.

3.2.1 PROCEDURE FOR SUBMISSION OF ONLINE BIDS

A. ACQUISITION OF DIGITAL SIGNATURE CERTIFICATE

For participating in the bid it is mandatory to procure the Digital Signatures of Class III only.

B. REGISTRATION IN TENDER WIZARD PORTAL

• Log in www.tenderwizard.com/OREDA Click “Register”, fill in the online registration Form.

• Un-registered bidders are required to pay registration fee of Rs 2300/- to M/s KSEDCL, Bangalore in tender wizard e-payment mode only.

• All bidders are required to pay the tender processing charge of Rs. 5900/- to M/s KSEDCL, Bangalore in tender wizard portal in e-payment mode only.

• As soon as the verification is done the e-tender user ID will be enabled/ provided.

c. ON-LINE REQUEST FOR e-TENDER DOCUMENTS
After viewing Tender Notification in www.tenderwizard.com/OREDA if bidder intends to participate in tender, it has to use its e-tendering User ID and Password which has been received after registration and acquisition of DSCs (Digital signature certificate) and to follow the step by step instructions given below.

- Insert the PKI (which consists of your Digital Signature Certificate) in your System.

(Note: Make sure that necessary software of PKI has been installed in your system)

- Click / Double Click to open the Microsoft Internet Explorer

(This icon will be located on the Desktop of the computer)

- Go to Start > Programs > Internet Explorer. Type www.tenderwizard.com/OREDA in the address bar, to access the Login Screen.

- Enter e-tender User Id and Password, click on “Go”.

- Click on “Click here to login” for selecting the Digital Signature Certificate. Select the Certificate and enter DSC Password. Re-enter the e-Procurement User Id Password.

- Click “Un Applied” to view / apply for new tenders.

- Click on Request icon for online request. After making the request, bidder has to pay the requisite tender processing fee (as indicated in tender notice) through e-payment facility only available in the portal. Bidders will receive the Tender Documents which can be checked and downloaded by following the below steps.
  - Click on the “Show form” icon.
  - Tender documents will appear on the screen.
  - Click “Click here to download” to download the documents.

- Please Note that Local MSMEs are required to opt for Line 1 on the dashboard of tender wizard portal for bid documents / bid sheets. Other bidders are required to opt for Line 2 for the same.

D. SUBMISSION OF EMD AND TENDER COST:

The bidders shall have to scan the Demand Draft towards EMD and Tender Cost and upload the same in .pdf or .jpg format.

E. SUBMISSION OF TECHNO-COMMERCIAL BIDS:

- The techno-commercial bid sheets in .xls format are to filled up and up-load without changing the file name. Submission of incomplete techno commercial bid sheets will be liable for rejection of the bid.
• Scanned copies of all related documents as per the checklist shall be uploaded in .pdf or .jpg format prior to last date and time of receipt of bids as specified in tender Notice.

F. SUBMISSION OF PRICE BIDS

• The bidder should fill up price schedule in the given bid sheets in .xls format and upload the same without changing the file name. The bid will be rejected if the schedule of price is submitted in incomplete form.

After completing all the formalities, Bidders will have to submit the tender as specified in NIT and must take care of all instructions. Prior to submission, verify whether all the required documents have been attached and uploaded to the particular tender or not.

Note:

• The bid sheets (.xls file) shall be uploaded in www.tenderwizard.com/OREDA portal, prior to online closing of the tender. By no other means (except online) price bid shall be accepted for evaluation of tender.

• Please note down or take a print of bid control number once it displayed on the screen.

G. SUBMISSION OF HARD COPIES

• Along with the e-tender, bidders shall also submit hard copies of all uploaded as well as other documents as asked for in the bid document in the form of a single hard bound book properly page numbered and Indexed.

No loose/ separate paper or spiral bound documents will be accepted.

• The bidders must sign at the bottom of all the pages of the hard bound book including each page of the bid document (which will also form an integral part of the hard bound book) as token of unconditional acceptance of the departmental terms and conditions, technical specifications etc.

• The Hard bound copy must be submitted in OREDA office at S-57, Mancheswar Industrial Estate, Bhubaneswar 751010 on or before the stated date in the manner prescribed elsewhere in the document. Submission extra/ unrelated documents may be avoided.

Note:

Filled in price bids/copies of the uploaded price bids must not be submitted in hard form. Submission of the same in hard form will liable the tender for rejection.

4. DEAD LINE FOR SUBMISSION OF BIDS

• Soft copy of the bid shall be uploaded through the portal www.tenderwizard.com/OREDA on or before the last date and time specified for online submission of the bids.
DD towards Tender cost, DD towards EMD, tender processing fee acknowledgement & a set of hard copies of all uploaded documents must be received by OREDA at the address specified not later than the time and date stated in the tender notification.

- In the event of the specified date for the submission of bids being declared a holiday for OREDA, the bids will be received on the next working day as per the time indicated in tender notification.

- OREDA may, at its discretion, extend this deadline for submission of bids by amending the Bidding Documents in accordance with Instruction to Bidders for the reasons specified therein at any time prior to opening of, in which case all rights and obligations of Employer and bidders will thereafter be subject to the deadline as extended.

5. LATE BIDS

- Soft copy of the bid will not be uploaded on the portal after expiry of submission time and the bidder shall not be permitted to submit the same by any other mode. In such case, even if the bidder has submitted the specific documents in hard copy in original (viz., EMD, tender cost & any other document) within the stipulated deadline, its bid shall be considered as late bid. The hard copy submitted [specific documents (viz., EMD, tender cost.)] shall be returned unopened to the bidder.

- Hard copy of the EMD in shape of DD if received by OREDA after the last date for submission of the bid the same will be considered as late bid even if the bidder has uploaded the soft copy of the bid within the stipulated deadline.

- In such a case, the soft part of the bid uploaded on the portal shall be sent unopened to “Archive” and shall not be considered at all any further.

6. MODIFICATION AND WITHDRAWAL OF BIDS

- Bidder may modify or withdraw their bids through the relevant provisions on the portal www.tenderwizard.com/OREDA up to the due date and time of submission of bid indicated in tender notification

- The Bidders may modify and resubmit their bids as per the provisions given in the portal.

- Bidders may withdraw their bids through the relevant provisions as mentioned in the portal.

- No bid shall be modified/ withdrawn after the dead line for submission of bids. Withdrawal/modification of bid before the expiry of bid validity shall result in forfeiture of Bidder’s EMD.

7. PROCEDURE FOR OPENING THE BIDS:

- The Technical bid shall be opened at the time & date mentioned in the NIT by OREDA in the presence of bidders, who choose to be present. If necessary, the firms may be called for Technical Presentation the schedule for which will be intimated by OREDA.
• The Price bid shall be opened after evaluation of technical suitability of the offers. The date for opening of Price bid shall be communicated subsequently. The Price Bid of only those bidders shall be opened who qualify in the technical bid.

• If due to any reason the due date is declared as a holiday the bid will be opened on next working day at the same time.

• Tender Opening event can be viewed online.

• Competitors bid sheets can also be viewed by all participating bidders.

4. Acceptance/ Rejection of the bid documents

Chief Executive, OREDA reserves the right to

i) reject or accept any or all bids without assigning any reason thereof.

ii) to split the quantities against the bid on more than one firm for the same items/ work.

iii) cancel the tender without assigning any reason thereof.

iv) alter or delete any of the terms and conditions mentioned in this document during the process of tender till finalisation.

No reason will be assigned by OREDA for this and the same will be binding on the bidders.

Chief Executive

I/we have carefully read & understood the above terms & conditions of the bid & agree to abide by them.

Signature of Bidder with Seal

For any assistant, Contact:
E-Tendering help desk number: 080- 40482000/121/133/140(Bangalore)
OREDA Help Desk- 09776823541/09937140591
5. Commercial Terms & Conditions

6.1 Rate
The offer should indicate the unit cost of the system, Installation & Commissioning charges, CMC Charges and taxes & duties separately. The unit cost must be inclusive of packing, forwarding, loading & unloading charges, cost of insurance and transportation FOR destination where the system will be installed as per the work order.

6.2 Tax & Duties etc
Applicable as per GST Rule.

6.3 Earnest Money Deposit
6.3.1 Earnest money for an amount Rs 8.90 lakhs is required to be deposited along with the bid without which the bid will not be accepted. No interest will be payable on the EMD amount under any circumstances.
6.3.2 Earnest money can be deposited in shape of a Demand Draft in favour of Chief Executive, OREDA from any Nationalised Bank Payable at Bhubaneswar and the proof of deposits should be attached to the bid.
6.3.3 E.M.D would be refunded to the unsuccessful Bidders after finalization of the bid without any interest.
6.3.4 EMD would be refunded to successful bidder(s) after submission of security deposit as detailed at clause 6.4.
6.3.5 E. M. D would be forfeited in case of non-compliance of the purchase order by the successful bidder.
6.3.6 In case of claim for exemption from deposition of Earnest money sufficient proof in support of claim for exemption of EMD as prescribed in Govt. of India Notification is to be attached with the bid.

6.4 Security Deposit/ Performance Guarantee Fees
The successful bidder must deposit the Security amount / Performance Guarantee fees @ 10% of the ordered value with the Chief Executive, OREDA, Bhubaneswar-10 at the time of acceptance of the work order in shape of Bank Guarantees in two parts, 50 % value with 5 years validity and the balance 50% value with 10 years validity from the date of acceptance of the work order or till the completion of respective warranty periods whichever is later. The said deposit would be forfeited, if the supplies are not made as per the Terms & Conditions of the purchase order. 50% of the security deposit amount will be refunded after the expiry of the Warranty period and CMC period (ref. clause 2 of Scope of Work) of the systems, subject to satisfactory execution / performance of the systems. Balance 50% of the Security deposit shall be released after expiry of warranty period of 10 years provided for the SPV modules subject to the successful performance.

6.5 Allocation of work:
In view of large geographical spread, remoteness, limited time available for completion of the project as well as past experience OREDA may split the work order among a maximum of 3 techno- commercially qualified bidders provided that the second, third bidder or latter in serial order positioned based on their lowest quoted prices agree to execute the work at the prices
quoted by L1 bidder. In such case the order will be split equitably to the maximum extent possible with regards to the value of the order. If only two bidders will be agreeable to execute the work at L1 prices the total order will be divided equally between the two. If other bidders are not agreeable to execute the work at L1 price then the entire work is to be executed by L1 bidder. While splitting OREDA would consider allotting villages/Blocks/Districts in contiguous manner taking village as a unit.

The decision of OREDA in this regard shall be final and binding.

6.6 Programme Execution Schedule

6.6.1 Installation & Commissioning: 3 months from the date of issue of the purchase orders

6.6.2 Upon intimation about commissioning of the systems by the executing firm a joint inspection will be carried out by the representatives of the executing firm, representatives of OREDA and representative nominated by the ST & SC Devt Department. Following such inspection a joint commissioning report (Annexure-D) shall be brought out within 30 days of intimation about commissioning of the systems in the prescribed format, which shall form a part of the documents for release of payments.

6.6.3 The issuance of a Joint Commissioning Report shall, in no way relieve the executing firm of its responsibility for satisfactory operation of the SPV systems.

6.7 Quantity

The quantities of Solar Home Lighting Systems, W-LED Model-III and Solar Street Lighting Systems, W-LED Model-II mentioned in the bid are subject to revision according to the requirement.

6.8 Validity of offer

The offer must be kept valid for a period of one year from the date of opening of the technical bid. No escalation clause except the admissible tax component under the period of consideration would be accepted. The validity can be further extended with mutual consent.

6.9 GSTCC

The bidders must submit attested copy of valid up to date GST clearance certificate along with the bid. The bid would not be considered without this document. The original certificate would be produced at the time of opening of the bid, or, before placement of purchase order, if required.

6.10 Warranty

The SPV Modules and the Balance of Systems (BOS) should be warranted against any manufacturing defect or bad workmanship for a period of 10 (Ten) and 5 (five) years respectively from the date of commissioning of the systems. Warranty certificate (Format in Annexure-1) to the above effect must be furnished along with the commissioning reports. Any defect noticed during warranty period should be rectified/replaced by the supplier free of cost upon due intimation by the concerned VEC/District Renewable energy Cell of OREDA. The
warranty period shall be extended by the period during which the systems remain non-operative due to reasons within the control of the executants. Care should be necessarily taken to make the system operational within a week of reporting of defect. If the system is not made operational within fifteen days, OREDA may rectify the same and charge all expenses incurred on the said account to the vendor. The defects should not be ordinarily attributed to tempering by the users. The firm has to devise suitable mechanism to ensure non-tempering of systems.

6.11 Penalty and termination of contract

The systems shall be supplied, installed and commissioned within the scheduled time. If the supplier fails to adhere to the schedule, OREDA shall without prejudice to its other remedies under the contract deduct from the contract price as liquidated damages a sum equivalent to 1% of the delivery price of the delayed goods or unperformed services for each week of delay until actual delivery or installation/commissioning up to a maximum deduction of 10% of the contract price for delayed goods or installation and commissioning. Once the maximum is reached (i.e 10 weeks of delay) OREDA may consider termination of the contract and forfeit the security deposit without prejudice to the other remedies of the contract along with recovery of mobilization advance by forfeiture of bank guarantee.

However, Chief Executive, OREDA may at his own discretion allow reasonable time extension upon written application of the supplying firm. If the delay is considered intentional or due to negligence of the vendor extension can be allowed with imposition of penalty. If the delay is considered to be genuine time extension can be allowed without imposition of penalty.

6.12 Force Majeure

The supplier of the SPV system shall not be charged with liquidated damages nor shall his security for performance be forfeited when failure of the supplier in making delivery is due to any event beyond the control of the supplier and could not have been foreseen, prevented or avoided by a prudent person. These include, but are not restricted to acts of God, acts of public enemy, acts of Government, fires, floods, epidemics, strikes, freights, embargoes and unusually severe weather.

6.13 Inspection

6.13.1 All tests and inspections shall be made at the place of delivery unless otherwise specifically agreed upon by the bidder and OREDA at the time of purchase. Authorized OREDA Officer shall be entitled at all reasonable time to inspect and supervise and test during erection and commissioning. Such inspection will not relieve the executing firm of their obligation in the contract.

6.13.2 OREDA has the right to have the tests carried out at its own cost by an independent agency at any point of time. Pre-delivery inspection at the factory site if necessary will be carried out by OREDA.

6.13.3 Post installation verification shall be conducted by OREDA at any point of time after receipt of installation report.

6.14 Payment

Payment will be made as per the following schedule subject to submission of completed documents as detailed against each
6.14.1 80% of the (material + installation) cost and 100% tax there on will be paid after successful installation of the system subject to submission of the following documents

- Joint commissioning report (in prescribed format)
- Installation report (in prescribed format)
- Photograph of beneficiary
- GPS details of the village
- UID details of the beneficiaries with contact no.
- Names of the trained village youths
- Contact details of cluster level service centres
- Photograph of village wise sign boards
- Signed agreement for CMC

Instruction for installation:

i. Before installation of the system the beneficiary must be consulted about the beams inside the house for installation of the lights and fan.

ii. The beneficiary should also be properly advised in the matter such that maximum usable area of the house including kitchen get proper illumination.

iii. Wiring should not be loose and interfering with other things within the household. To the maximum extent possible concealed wiring must be done.

iv. To the extent possible panel must be installed on the roof top or on a form wooden/metal post in front or back yard of the house in an open, shade free space.

v. Beneficiary must be properly advised about his responsibilities in maintaining the system including cleaning of panel, luminare etc. The beneficiary must also be given a leaf let written in Odiya language clearly mentioning about the installed system, maintenance requirement, do’s and don’ts etc.

6.14.2 20% of (material + installation) cost will be released after successful operation of 90 days from date of commissioning and completion of verification by third party verifier engaged by OREDA or by Asst. Director (T) of concerned district.

6.15 Execution

Execution of work shall be carried out in an approved manner as outlined in the technical specification or where not outlined, in accordance with relevant Indian Standard Specification, to the reasonable satisfaction of the Authorized OREDA Officer.
6.16 **Comprehensive Maintenance Contract**

The bidder must enter into a Comprehensive maintenance contract for the specified period at the time of execution of the order. Offer without such CMC shall not be considered. (sample format of CMC enclosed at Annex- E) The scope of CMC must cover supply of spare parts including battery / services during the contract in force. Order shall be placed on bidders who agree to offer such CMC. The CMC charges quoted by the bidder must be realistic in view of actual rendering of after sale services. Bids with very low/unrealistic CMC charges will be liable for rejection. The payment of annual maintenance charges under the Comprehensive Maintenance Contract shall depend upon the functionality of the system duly certified by the concerned local panchayat / Authorised officials of OREDA. Upon receipt of such certificates CMC amount as applicable shall be paid at the end of 1st, 2nd, 3rd, 4th and 5th years.

6.17 **Limitation of Liability**

OREDA, will, in no case be responsible for any accident fatal or non-fatal, caused to any worker or outsider in course of transport or execution of work. All the expenditure including treatment or compensation will be entirely borne by the Executants. The Executants shall also be responsible for any claims of the workers including PF, Gratuity, ESI & other legal obligations.

6.18 **Dispute**

For adjudication of any dispute between OREDA and the bidders arising in this case, reference can be made to any Law courts under the jurisdiction of Orissa High court only. The Chief Executive, OREDA reserves the right to accept or reject any or all bids without assigning any reason thereof.

Chief Executive
OREDA

I/We have carefully read and understood the above terms and conditions of the bid and agree to abide by them.

SIGNATURE OF BIDDER WITH SEAL
7 Technical Specification for Solar Home Lighting System-Model- III

7.1 Definition
A Solar Home Lighting System aims at providing solar electricity for operating lights and a DC Fan.

7.2 Models
(I) MODEL – III (2 white LED luminaires and one DC fan of wattage upto 10W)

<table>
<thead>
<tr>
<th>Component</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV Module</td>
<td>1x 24 Wp under STC</td>
</tr>
<tr>
<td>Lamps</td>
<td>2 x LEDs (2.5W)</td>
</tr>
<tr>
<td>DC Fan</td>
<td>1x10 Watt</td>
</tr>
<tr>
<td>Battery</td>
<td>Lead Acid Tubular flooded or Gel / VRLA, 12V-20AH @ C/20</td>
</tr>
<tr>
<td>Other Components</td>
<td>Control electronics, Module mounting hardware, Battery box, Inter-connecting wires / cables, separate Switches, operation, instruction and maintenance manual.</td>
</tr>
</tbody>
</table>

7.3 Duty Cycle

<table>
<thead>
<tr>
<th>MODELS</th>
<th>AVERAGE HOURS OF OPERATION/ DAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model-III</td>
<td>2 Lights and one DC fan of wattage upto 10W for 5 Hours a day</td>
</tr>
</tbody>
</table>

7.4 PV Module.
(i) Indigenously manufactured PV modules should be used.
(ii) The PV modules should be made up of Crystalline silicon solar cells and must have a certificate of testing conforming to IEC 61215 Edition II/BIS 14286 from an NABL or IECQ accredited laboratory.
(iii) The power output of the modules under STC should be a minimum of 24 Wp.
(iv) The module efficiency for the PV modules should not be less than 12%.
(v) The terminal box on the module should have a provision for opening for replacing the cable, if required.
(vi) A strip containing the following details should be laminated inside the module so as to clearly visible from front side
(a) Name of the manufacturer or distinctive logo.
(b) Model or Type No.
(c) Serial number
(d) Year of manufacture
7.5 **Electronics**

i. The total electronic efficiency should be at least 85%.
ii. Electronics should have temperature compensation for proper charging of the battery throughout the year. The idle current should be less than 2mA
iii. The voltage drop from module terminals to the battery terminals should not exceed 0.6 volts including the drop across the diode and the cable when measured at maximum charging current.
iv. The PCB containing the electronics should be capable of solder free installation and replacement.
v. Necessary lengths of wire/cables, switches suitable for DC use and fuses should be provided.
vi. The system should have a USB port for mobile charging.

7.6 **Battery**

i) The battery should have a minimum rating of 12V, 20Ah at C/20 discharge rate.
ii) 75% of the rated capacity of the battery should be between fully charged and load cut off conditions.
iii) Battery should conform to the latest BIS/International standards.

7.7 **Lamps**

i) The Lamps will be of white LED type
ii) The colour temperature of W-LEDs used in the system should be in the range of 5500° K - 6500° K
iii) LEDs should not emit ultraviolet light.
iv) The light output from the W-LED light source should be constant throughout the duty cycle.
v) The lamps should be housed in an assembly suitable for indoor use.
vi) No blackening or reduction in the lumen output by more than 10% should be observed after 1000 ON/OFF cycles (two minutes ON followed by four minutes OFF is one cycle).

vii) The lamp should be housed in an assembly suitable for indoor use with a reflector on its back. While fixing the assembly the lamp should be held in a base up configuration.

7.8 **Electronic Protection**

(i) Adequate protection is to be incorporated under no load conditions e.g. when the lamp is removed and the system is switched ON.
(ii) The system should have protection against battery overcharge and deep discharge conditions.
(iii) Fuses should be provided to protect against short circuit conditions.
(iv) A blocking diode should be provided as part of the electronics to prevent reverse flow of current through the PV module(s) in case such a diode is not provided with the Solar Module(s).
(v) Full protection against open circuit, accidental short circuit & reverse polarity should be provided.

7.9 **Mechanical Components**

i. Corrosion resistant metallic frame structure should be provided to hold the SPV module.
ii. The frame structure should have provision to adjust its angle of inclination to the horizontal, so that it can be installed at the specified tilt angle.

iii. Light source should be either for wall mounted or ceiling mounted or can be hung from the ceiling in a stable manner, as per site requirements.

iv. A vented plastic/wooden/metallic box with acid proof corrosion resistant paint for housing the storage battery indoors should be provided.

7.10 Indicators

i. The system should have two indicators, green and red.

ii. The green indicator should indicate the charging under progress and should glow only when the charging is taking place. It should stop glowing when the battery is fully charged.

iii. Red indicator should indicate the battery “load cut Off” condition

7.11 Other Features:

(I) The PV Module(s) will be warranted for a minimum period of 10 years from the date of supply and the Solar Home System, Model-III (including the battery) will be warranted for a period of two years from the date of supply. The warranty card to be supplied with the system must contain the details of the system supplied as given in the Annexure-I. The manufacturers can also provide additional information about the system and conditions of warranty as necessary.

(II) An operation, Instruction and Maintenance Manual in English and the Oriya language, should be provided with the System. The instruction manual should be printed on thick paper and properly laminated so that it can be preserved for a long time.

The following minimum details must be provided in the manual:

a) About photovoltaic.
c) About PV Module.
d) About LED
e) About battery
f) Clear instructions about mounting of PV module(s).
g) About electronics.
h) About charging and significance of indicators.
i) Do’s and Do Not’s.
j) Clear instructions on regular maintenance and trouble shooting of the Solar Home System.
k) Name and address and Phone No. of the contract person in case of failure or complaint of the System.

8 Technical Specification for Solar Street Lighting System: Model-II

8.1 Definition:

A stand alone solar photovoltaic Street Lighting System (SLS) is an outdoor lighting unit used for illuminating a street or an open area. The Solar photovoltaic Street Lighting System comprises of
Solar photovoltaic (SPV) module, a luminaire, storage battery, control electronics, interconnecting wires/cables, module mounting pole including hardware and battery box, operation instruction and maintenance manual. The luminaire is based on white Light Emitting Diode (W-LED), a solid state device which emits light when electric current passes through it. The luminaire is mounted on the pole at a suitable angle to maximize illumination. The configuration of the Model-II is described below.

<table>
<thead>
<tr>
<th>Component</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV Module</td>
<td>1x 30Wp under STC</td>
</tr>
<tr>
<td>Lamps</td>
<td>White light emitting Diode (W-LED), 7 Watt(max), W-LED luminaire</td>
</tr>
<tr>
<td>Battery</td>
<td>1x 12V, 20 Ahr, @ C/20 sealed maintenance free Lead Acid tubular flooded or tubular GEL/VRLA.</td>
</tr>
<tr>
<td>Mounting of light</td>
<td>Pole mounted, minimum 4 meter above the ground level</td>
</tr>
</tbody>
</table>
| Light output    | Multiple light level:  
|                 | The lamp should have 2 levels of light to take care of different lighting need during night  
|                 | - Minimum 16 lux when measured at the periphery of 4 meter diameter from a height of 4 meter (At high illumination level)  
|                 | - The illumination should be uniform without dark bends or abrupt variations.  
|                 | - Minimum 8 lux at lower illumination level. (Higher light output will be preferred) |
| Electronics     | Maximum Power Point Tracker (MPPT) must be provided in the system. Overall total efficiency of the Electronics should be Minimum 85% |
| Duty Cycle      | Dusk to Dawn  
|                 | 4 Hours full light, rest of the time at lower light with monitor sensor |
| Autonomy        | 3 days or minimum 42 operating hours per permissible discharge |
8.2 TECHNICAL DETAILS

8.2.1 PV MODULE

(i) Indigenously manufactured PV modules should be used.

(ii) The power output of the module under STC should be a minimum of 30Wp.

(iii) The PV module should be made up of crystalline silicon solar cells and must have a certificate of testing conforming to IEC 61215 Edition II /BIS 14286 from an NABL or IECQ accredited laboratory.

(iv) The load voltage of 16.40 volt for 12 V battery or appropriate voltage for charging of battery used, under the standard test conditions (STC) of measurement.

(v) The module efficiency should not be less than 12%.

(vi) The terminal box on the module should have a provision for opening, for replacing the cable, if required.

(vii) There should be name plate fixed inside the module which will give:

a. Name of the manufacturer or distinctive logo

b. Model number

C. Serial number

d. Year of manufacture

8.2.2 BATTERY

(i) 1x 12V, 20 AHR, @ C/20 sealed maintenance free Lead Acid tubular flooded or tubular GEL/VRLA.

(ii) Battery should conform to the latest BIS/International standards

8.2.3 LIGHT SOURCE

(i) The light source will be of white LED type.

(ii) The colour temperature of W-LEDs used in the system should be in the range of 5500°K – 6500°K.

(iii) LEDs should not emit ultraviolet light.

(iv) The light output from the W-LED light source should be constant throughout the duty cycle.

(V) The lamps should be housed in an assembly suitable for outdoor use.

8.2.4 ELECTRONICS
(i) The total electronic efficiency should be at least 85%.

(ii) The idle current should be less than 1 mA.

(iii) The voltage drop from module terminals to the battery terminals should not exceed 0.6 volts including the drop across the diode and the cable when measured at maximum charging current.

(iv) The PCB containing the electronics should be capable of solar free installation and replacement.

8.2.5 ELECTRONIC PROTECTION

I. The system should have protection against battery overcharge, deep discharge condition.

II. Adequate protection should be provided against battery reverse polarity.

III. Fuses should be provided to protect against short circuit conditions. Fuse is not mandatory, in case, over current protection is provided in the driver circuit.

IV. Protection for reverse flow of current through the PV module(s) should be provided.

8.2.6 MECHANICAL COMPONENTS

i. A corrosion resistant metallic frame structure should be fixed on the pole to hold the SPV module.

ii. The frame structure should have provision so that the module can be oriented at the suitable tilt angle.

iii. The pole should be made of Galvanised Iron (GI) pipe.

iv. The height of the pole should be 5 meters above the ground level, after grouting and final installation.

v. The pole should have the provision to hold the luminaire.

vi. The luminaire housing should be waterproof (IP 65) and should be printed with a corrosion resistant paint and should be housing the battery.

8.2.7 INDICATORS

i. The system should have two indicators, green and red.

ii. The green indicator should indicate the charging under progress and should glow only when the charging is taking place. It should stop glowing when the battery is fully charged.

iii. Red indicator should indicate the battery “load cut off” condition.

8.2.8 QUALITY AND WARRANTY
i. The PV Module(s) will be warranted for a minimum period of 10 years from the date of supply and the Solar Street lighting system, Model-II (including the battery) will be warranted for a period of two years from the date of supply. The warranty card to be supplied with the system must contain the details of the system supplied as given in the Annexure-II. The manufacturers can also provide additional information about the system and conditions of warranty as necessary.

ii. An operation, Instruction and Maintenance Manual in English and the Oriya language, should be provided with the System.

The following minimum details must be provided in the manual:

1) About photovoltaic.
3) About PV Module.
4) About LED
5) About battery
6) Clear instructions about mounting of PV module(s).
7) About electronics.
8) About charging and significance of indicators.
9) Do’s and Do Not’s.
10) Clear instructions on regular maintenance and trouble shooting of the Solar Home System.
11) Name and address and Phone No. of the contract person in case of failure or complaint of the System.
<table>
<thead>
<tr>
<th>1. Name &amp; Address of the Manufacturer/Supplier of the System</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>2. Name &amp; Address of the Users / Village Energy Committee</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>3. Date of supply of the system</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>4. Details of SPV module (s) supplied in the system</td>
</tr>
<tr>
<td>Make (Name of the manufacturer)</td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Serial No. (s)</td>
</tr>
<tr>
<td>Wattage of the PV Modules under STC</td>
</tr>
<tr>
<td>Warranty valid up to</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>5. Details of Battery</td>
</tr>
<tr>
<td>Make (Name of the manufacturer)</td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Batch/Serial Nos. (s)</td>
</tr>
<tr>
<td>Rated V &amp; AH capacity at C/20/C/10 rate at 20 C</td>
</tr>
<tr>
<td>Warranty valid up to</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>6. Details of Electronics other BOS items</td>
</tr>
<tr>
<td>Make (Name of the manufacturer)</td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Serial No (s)</td>
</tr>
<tr>
<td>Warranty valid up to</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>7. Designation &amp; Address of the person to be contacted for claiming warranty obligations.</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

(During the warranty period MNRE / OREDA authorized Officer / Users / VECs nominated trained person reserves the right to cross check the performance of the system with the minimum levels specified in the MNRE specification.)

(Signature)

Name & Designation

Name & address of the
Manufacturer/Supplier

(Seal)

Place: -

Date: -
ANNEXURE-2

Model Bank Guarantee format for Furnishing EMD

Whereas …………………………………………………………………………………………………………… (herein after called “tenderer”) has submitted their offer dated …………………….. for the supply of …………………. (herein after called “tenderer”) against the purchaser’s tender enquiry No. ……………………………………… KNOW ALL MEN by this present that we ……………………………… of ………………………………………………….. having registered office at …………………………….. are bound onto …………………………………… (herein after called “Purchaser”) in the sum of ………………………………….. for which payment will and truly to be made to the said purchaser, the bank binds itself, its successors and assigns by this presents.
Sealed with the Common Seal of the said Bank this ………………….day of 20……. THE CONDITIONS OF THIS OBLIGATIONS ARE

1) If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
2) If the tenderer having been notified of the acceptance of his tender by the purchaser during the period of its validity;- 
   a. If the tenderer fails to furnished the performance security for the due performance of the contract.
   b. Fails or refuses to accept / execute the contract.

We undertake to pay the purchaser up to the above amount upon receipt of its first written demand, without the purchaser having to substantiate its demand, provided that in its demand the purchaser will note that the amount claimed by it due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including 45 days after the period of tender validity and any demand in respect thereof should reach the bank not later than the above date.

Our …………………………………… branch at ………………………………………* (Name and address of the…………………..* branch) is liable to pay the guaranteed amount depending on the filling of claim and any part thereof under this bank Guarantee only and only if you serve upon us at our ………………………………..* branch a written claim or demand and received by us at our …………………………………….* branch on or before Dt…………………. otherwise bank shall be discharged of all liabilities under this guarantee thereafter.

…………………………………………………………
Signature if the authorized officer of the bank
………………………………………………………………
Name and Designation of the officer
………………………………………………………………
Seal, Name and address of the Bank and the Branch

* Preferably at the head quarter of the authority competent to sanction the expenditure for purchase of goods or at the concerned district headquarter or the state headquarter.
ANNEXURE-3

BOARD RESOLUTION

(To be submitted on pre-printed Corporate Letter Head)

CERTIFIED TRUE COPY OF THE RESOLUTION PASSED IN THE MEETING OF THE BOARD OF DIRECTORS OF M/S……………………………………………………………………………………………………………………

HAVING ITS REGISTERED OFFICE AT……………………………………………. HELD ON DD/MM/YY AT…. HRS

Resolved that the company/firm do agree to participate in the tender invited by OREDA vide Notice No ………………………………… Dtd……………………. for Design, supply, installation, commissioning and maintenance for a period of 5 years of 222 No. of 10 KW Solar PV Power Plants (with battery backup), 2220 No. of Solar Street Lighting Systems (SLS), 222 No. of 1 HP AC Submersible Pump with overhead tank as per the technical specification and description given in the tender document in Residential Schools located in 11 district of Odisha.

RESOLVED FURTHER THAT, the company/firm does agree to unconditionally accept all terms and conditions mentioned in the aforementioned tender document.

RESOLVED FURTHER THAT, subject to eligibility, the company/firm agree to open an effective service center in the state of Odisha, preferably in the vicinity of projects so as to cater regular maintenance services to the customers of the company/firm.

RESOLVED FURTHER THAT, Ms/Mr ……………………………………………… Director and/or Ms/Mr…………………………………. authorized signatory of the company be and hereby authorized to sign, execute and submit such applications, undertakings, agreements and other requisite documents writings and deeds as may be deemed necessary or expedient to implement the above assignment

AND RESOLVED FURTHER THAT, the common seal of the company is affixed, wherever necessary, in the presence of any Director of the company who shall sign the same as token of the presence.

For …………………………………………………………………………

Chairman/Company Secretary

Name of the Authorized person

Specimen Signature of Authorized person

The above signature to be attested by the person signing the resolution
Format of Performance for last 3 years
(To be submitted on letter head of company)

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Particulars</th>
<th>Details to be filled up</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Name of the bidder and contact details</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Status of bidder (Manufacturer/System integrator)</td>
<td>In support of this the bidder may submit valid certificate from MNRE/Other state agency/Rating agency</td>
</tr>
<tr>
<td>3</td>
<td>Production/Integrating capacity per annum</td>
<td>In support of this the bidder may submit valid Production/integrating certificate from NSIC/DIC/OSIC</td>
</tr>
<tr>
<td>4</td>
<td>Total amount of solar system (On/Off-grid Power plant, Street light, Solar Pump, Home lighting system) installed in kWp in 3 years (2014-15 to 2016-17)</td>
<td>Please submit year wise installed data along with roofs thereof such as work completion reports by the concerned customer.</td>
</tr>
<tr>
<td>5</td>
<td>Annual Turnover over last 3 years (2014-15 to 2016-17)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>No. of employee currently working</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Awards/Honours received during last 3 year</td>
<td></td>
</tr>
</tbody>
</table>

Date:....................

(Signature).................................................................

Place:...................

(Printed Name)..........................................................

(Designation)..........................................................

(Common Seal)..........................................................
TECHNICAL BID

Supply, installation, commissioning and maintenance for Solar Home Lighting System-Model - III

We conform the following technical specification.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Duty Cycle</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Lamp</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Battery</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Electronics</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>PV Module(s)</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Electronics Protection</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Mechanical Hardware</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Others Features</td>
<td></td>
</tr>
</tbody>
</table>

SIGNATURE OF THE BIDDER WITH SEAL
TECHNICAL BID

Supply, installation, commissioning and maintenance for Solar Street Lighting System, Model-II

We conform the following technical specification.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Duty Cycle</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Lamp</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Battery</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Electronics</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>PV Module(s)</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Electronics Protection</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Mechanical Hardware</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Others Features</td>
<td></td>
</tr>
</tbody>
</table>

SIGNATURE OF THE BIDDER WITH SEAL
## PRICE BID

**SOLAR HOME LIGHTING SYSTEM (Model-III) WITH FIVE YEARS WARRANTY AS WELL AS CMC**

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Item</th>
<th>Rate per system</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Supply of Solar Home Systems (Model-III) comprising of CFL luminary</td>
<td></td>
</tr>
<tr>
<td></td>
<td>with lamp, lead acid battery, PV module(s), control electronics,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>inter-connection wires and cables, Module mounting structure,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Battery box etc, all complete as per technical specifications,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>operation instructions and maintenance manual all complete</td>
<td></td>
</tr>
<tr>
<td></td>
<td>including packing &amp; forwarding, loading and unloading charges</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and cost of insurance and transportation, delivery FOR assigned</td>
<td></td>
</tr>
<tr>
<td></td>
<td>site.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>GST @ 5% on item-1</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Sub-Total (1+2)----------- (A)</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Installation &amp; commissioning of the system at the given location</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and proper documentation thereof.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>GST @ 18% on item-1</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Sub-Total (4+5)-----------(B)</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Annualized Comprehensive maintenance contract for five years.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1st year</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2nd year</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3rd year</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4th Year</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5th Year</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>GST @ 18% on item-7</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Sub Total (7+8)-----------(C)</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>GRAND TOTAL (A+B+C )</td>
<td></td>
</tr>
</tbody>
</table>

Bidders are required to follow the details of technical specification while quoting rates for each item.

**SIGNATURE OF THE BIDDER WITH SEAL**
ANNEXURE-B2

PRICE BID

SOLAR STREET LIGHTING SYSTEM WITH FIVE YEARS WARRANTY AS WELL AS CMC.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Item</th>
<th>Rate per system</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Supply of Solar Street lighting System(Model-II) comprising of LED, Lead acid battery, PV module(s), control electronics (With a spare PCB), Interconnection wires and cables, Module mounting structure, Battery box etc, all complete as per technical specifications, operation instructions and maintenance manual all complete including packing &amp; forwarding, loading and unloading charges and cost of insurance and transportation, delivery FOR assigned site.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>GST @ 5% on item-1</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Sub-Total (1+2)-------------------------(A)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Installation &amp; commissioning of the system at the given location and proper documentation thereof.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>GST @ 18% on item-1</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Sub-Total (4+5)-------------------------(B)</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Annualized Comprehensive Maintenance Contract for five years</td>
<td>1st year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2nd year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3rd year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4th Year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5th Year</td>
</tr>
<tr>
<td>8.</td>
<td>GST @ 18% on item-7</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Sub Total (7+8).......................... (C)</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>GRAND TOTAL (A+B+C)</td>
<td></td>
</tr>
</tbody>
</table>

Bidders are required to follow the details of technical specification while quoting rates for each item

SIGNATURE OF THE BIDDER WITH SEAL
## MNRE Authorised Test Centres

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Name and Address of Test Center</th>
<th>Products Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Electronics Regional Test Laboratory (East), D N Block, Sector V, Salt Lake City, Bidhan Nagar, Calcutta - 700 091 Fax : 033-23679472 / 23678974 E.mail : <a href="mailto:ertleast@ertle.ernet.in">ertleast@ertle.ernet.in</a></td>
<td>Solar Lighting Systems</td>
</tr>
<tr>
<td>2</td>
<td>Central Power Research Institute Energy Conservation and Development Division PBN 8066 Sir C.V. Raman Road Bangalore: 560080 Tel No. 080-23604682 080-23604682 , Fax: 080-23601213</td>
<td>Solar Lighting Systems</td>
</tr>
<tr>
<td>4</td>
<td>Electronics Test and Development Centre (ETDC) Ring Road, Peenya Industrial Estate, Bangalore - 560 058 Telephone - 080 - 8395992, 080- 9394766 Fax - 080- 839 1804</td>
<td>PV Modules</td>
</tr>
</tbody>
</table>
Joint Commissioning Report on installation of SPV systems under RVEP

Village: 
G.P.: 
Block: 

Name of the supplier: 
A. Details of HLS installed:

<table>
<thead>
<tr>
<th>S/N</th>
<th>Name of the beneficiary</th>
<th>Module No.</th>
<th>Battery No.</th>
<th>Electronics No.</th>
<th>Luminaries No.</th>
<th>Date of Installation &amp; Commissioning</th>
<th>Status of the system</th>
</tr>
</thead>
</table>

B. Details of SLS installed:

<table>
<thead>
<tr>
<th>S/N</th>
<th>Location of the system</th>
<th>Module No.</th>
<th>Battery No.</th>
<th>Electronics No.</th>
<th>Luminary No.</th>
<th>Date of Installation</th>
<th>Status of the system</th>
</tr>
</thead>
</table>

Representative of supplying firm: 
Asst. Director: RE Cell 
Secretary: VEC 
Representative of Gram Panchayat: 

33
SAMPLE FORMAT FOR C.M.C

(Subject to modification as per suitability of system and project requirement)

Comprehensive Maintenance Contract (CMC) for maintenance of SPV system supplied and install by M/S …………………………………………………………………………..

………………………………………………………………………………

for five years.

This Comprehensive Maintenance Contract (CMC) is executed between the Orissa Renewable Energy Development Agency (OREDA), S-3-59, Mancheswar Industrial Estate, Bhubaneswar-10, represented by its Officer on Special duty herein after called as Ist. party and M/S …………………………………………

…………………………………………………………………………………………

herein after called as 2nd party, for maintenance of ........ sets of …………………………… for a period of five years with effect from ………………… AD, supplied, installed and commissioned vide purchase order No ………………… Dated ………………… in ………………… village covering ………………… blocks of ………………… Districts.

The 2nd party will maintain these ................. Systems as per the terms and conditions mentioned here under.

1. It has been envisaged in the purchase order No ................./ OREDA dated ......................... under clause No ...................... that these ................. sets of .................................... shall be warranted against any manufacturing defect and bad workmanship at least for a period of 5 years for the system and battery and 10 years for the PV modules from the date of commissioning. As these systems have been commissioned and handed over to the 1st party through its Assistant Director (Tech)/ authorized OREDA official at DRDA ......................... During ......................... all these systems, as such are covered under warranty period up to ........................., ......................... and ......................... respectively.

Hence, the 2nd party is fully responsible for their trouble free maintenance and the 2nd party is liable to rectify/ remove any defect noticed within the aforesaid period free of cost.

2. The 2nd party will impart training to two nos. of youth from each completed village to be able to provide first aid repair service for the SPV systems installed in the village.
3. The 2nd party will ensure a formal training of such identified youth (2 from each village) at a cluster level of villages in consultation with the 1st party.

4. An amount of 10% of the ordered value shall be kept as fees towards Performance guarantee for a period of 10 years of warranty & maintenance. After expiry of the successful and satisfactory maintenance period of 10 years which remains valid up to …………………. AD, the security deposit / PGF shall be returned to the 2nd party thereafter only.

5. The CMC includes repair/ replacement of all spares and consumable, including CF Lamp, battery & PV module during the maintenance period.

6. The 2nd party will setup a state level office at Bhubaneswar duly headed by a Service Engineer.

7. The 2nd party shall undertake the periodical maintenance work of these …… sets prescribed formats attached herewith (Format I) on the 10th of every succeeding quarter duly countersigned by the concerned Assistant Director (Tech), / Authorized Officer, R.E. Cell, DRDA ………………….

8. The 2nd party should be in readiness to attend to the defects of any system (out of these …….. Sets), as and when required by the beneficiary/ 1st party and ensure rectification of defects and restore functionality within seven days of lodging the complaints. The 2nd party shall furnish the status report after the maintenance work are over, which shall invariably bear the signature of the beneficiaries as per the format annexed herewith (format-II).

9. The 2nd party shall appraise the 1st party about the requirements and supply of spares during warranty as well as CMC period.

10. The 2nd party will ensure to submit quarterly reports of visits made by their representatives to the completed villages every three months during the warranty and CMC period.

11. The 1st party in consultation and cost sharing with the 2nd party will maintain a central complaint cell at Bhubaneswar alongwith adequate stock of spare parts as a backup.

12. Separate bills/ invoices in triplicate enclosing the prescribed formats duly filled in (Format-I and II) are to be submitted by the 2nd party to 1st party for effecting payment after end of each year from the date of maintenance of the systems.

13. Certificates in support of successful maintenance of the system(s) shall be obtained from the users which should be countersigned by the Assistant Director (Tech), / Authorised Officer, RE Cell, DRDA ………………… In token of verification of maintenance done.

14. It will be the liberty of the 1st party to cross check the systems maintained by the 2nd party. Random verification of the maintenance may be carried out by the 1st party wherever necessary.

15. The 2nd party may continue to maintain the gadgets after expiry of the maintenance period of 10 years, provided the beneficiaries/ 1st party desires.

16. For adjudication of any dispute between the two parties arising on execution of this CMC, the matter shall first be brought to the notice of Chief Executive, OREDA.
17. In case, there will be no amicable settlement of the issues, the matter can be referred to the court of law having jurisdiction at Bhubaneswar only.

The Annual Maintenance contract is signed jointly between the two parties today i.e on dated ……………… day of 2016 and shall come into force from the date of its signature(s).

For and on behalf of Orissa Renewable Energy Development Agency, Bhubaneswar
(1st Party)

For and on behalf of M/S ………………………
(2nd party) with Seal

Deputy Director (Tech),
Project Division, OREDA
(Seal)

Witness

Deputy Director (Tech)
RE Division, OREDA
Bhubaneswa
(Seal)
ORISSA RENEWABLE ENERGY DEVELOPMENT AGENCY

BHUBANESWAR

FORMAT-I

(To be furnished in duplicate by the 2nd Party)

STATUS REPORT OF SPV HLS & SLS

(A) PARTICULARS

1. Name of the beneficiary : 

2. (a) Placement of installation
   (village/hamlets).
   (b) Gram Panchayat : 

3. Block : 

4. District : 

5. Date of visit : 

6. Type of installation

7. Name & Address of the Staff visiting the installation : 

(B) OBSERVATIONS (To be filled in by the staff visiting the installation).

(i) Have seen any : 

8. Visual damage of the system

9. Damage of the module : 

10. Sl. No. & make of the module :
11. Sl. No. of the system : 
12. Condition of the battery : 
13. Make & Sl. No. of the battery : 
   (ii) Conditions of the 
14. Electronic Controller : 
15. Compact Fluorescent Lamp : 
16. Electrical condition : 
17. Routine maintenance work : 
   (i) Cleaning of the module surface : 
   (ii) Toping of the battery : 
   (iii) Tightening of the all electrical connection : 
   (iv) Changing of Tile angle of the module mounting structure. 
   (v) Cleaning & greasing of the battery terminal : 
18. Type of repair / rectification carried out : 
19. Suggestion imparted to the beneficiary : 
20. Remarks of the beneficiary : 

Signature of the beneficiary / representative (with name & stamp if any) with date.

Signature of the staff visiting the installations with date
REPAIR & MAINTENANCE OF SOLAR STREET LIGHTING SYSTEM / SOLAR HOME SYSTEMS IN ORISSA

1. Date of Inspection : 
2. Location : 

<table>
<thead>
<tr>
<th>Village</th>
<th>Block</th>
<th>District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Battery make & No. : 
4. Module make & No. : 
5. Make of the System : 
6. Visual Inspection (conditions of)
   (a) Module
   (b) Mast
   (c) Luminaire
   (d) Electronics
   (e) Battery
7. Battery condition : 
   Cell No. : 
   Cell Voltage : 
   SP. Gr. : 
   Terminal : Clean / Not clean

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Battery box condition : O.K / Not O.K.
Volt Plugs : Clean / Not Clean

8. (A) General Maintenance
(a) Distilled water quantity replenished :
(b) Checking of battery terminals :
(c) Cleaning of Luminairs :
(d) Tightening of loose connection :
   (if any).
(e) Cleaning of module :

(B) Repairs done
(a) Replacement of Luminairs :
(b) Replacement of charge controller / Inverter :
(c) Any other repair / replacement done :

(C) Functional Status – (after repair & maintenance)

(D) Repairs if any to be done further

Remarks

Signature of the Inspecting Agency Name & Signature of the User
Date: - Date:-

Signature of the Representative of the Supplier (2nd Party)